

1 GGCACGAGGAGATCTAGGTTCAAATTAATGTTGCCCTAGTGGTAAAGACAGAGACCCCTCAGACTGATGAAATGCGCTCAGAATTACTTT
 91 AGACAAAGCGGATATTGGCCACTCTCTTCCCTTTTCTCTGTTTGTAGTGAAGAGACCTGAAAGAAAAAAGTAGGGAGAACATAATG
 181 AGAACAAATACGGTAATCTCTTCTATTGCTAGTTCAAGTGCTGGACTTGGGACTTAGGAGGGGCAATGGAGCCGCTTAGTGCCTACATCT
 271 GACTTGGACTGAATATAGGTGAGAGACAAAGATTGTCTCATATCCGGGAAATCATAACTATGACTAGGACGGGAAGAGGACACTGC
 361 CTTTACTTCAGTGGGAATCTCGGCCTCAGCCTGCAAGCCAAGTGTTCACAGTGAGAAAAAGCAAGAGAATAAGCTAATACTCCTGTCTCTGA
 451 ACAAGGACGGGCTCCTTGGTAAAGCTACTCCTTGTATCGATCCTTTGCACCGGATTGTTCAAAGTGGACCCAGGGAGAAAGTCGGAGCA
 541 AAGAACTTACCACCAAGCAGTCCCAAGAGGGCCCAAGCAAACTGGAGGTGAGACCCCAAGAAAGCTGGAACCATGCTGACTTTGTACAC
 631 TGTGAGGACACAGAGTCTGTTCTCTGGAAGCCAGTGTCAACGCAGATGAGGAAGTCGGAGGTCCCAAAATCTGCCGTGTATGTGGGAC
 721 AAGGCCACTGGCTATCACTTCAATGTCAATGTGAAGGATGCAAGGGCTTTTTCAGGAGGGCCCATGAAACGCAACGCCCGGCTGAGG
 811 TGCCCCCTCCGGAAGGGCCCTGCGAGATCAACCCGGAGACCCGGCGACAGTCCAGGCTGCCGCTGCGCAAGTGCCTGGAGAGCGGC
 901 ATGAAGAAGAGATGATCATGTCCGACGAGGCCGTGGAGGAGGGGCCCTTGATCAAGCGGAAGAAAGTGAACGGACAGGGACTCAG

* * * * *
 L E V R P K E S W N H A D F V H
 C E D T E S V P G K P S V N A D E E V G G P Q I C R V C G D
 K A T G Y H F N V M T C E G C K G F F R R A M K R N A R L R
 C P F R K G A C E I T R K T R R Q C Q A C R L R K C L E S G
 M K K E M I M S D E A V E E R R A L I K R K K S E R T G T Q

16
 46
 76
 106
 136

Fig. 1A

991 CCACTGGGAGTGCAGGGGCTGACAGAGGAGCAGCGGATGATCATCAGGAGCTGATGGACGCTCAGATGAAAACCTTTGACACTACCTTC
 P L G V Q G L T E E Q R M M I R E L M D A Q M K T F D T T F 166
 1081 TCCCATTTCAAGAAATTTCCGGCTGCCAGGGGTGCTTAGCAGTGGCTGCGAGTTGCCAGAGCCTCTGCAGGCCCCCATCGAGGGAAGAAGCT
 S H F K N F R L P G V L S S G C E L P E P L Q A P S R E E A 196
 1171 GCCAAGTGGAGCCAGGTCCGGAAAGATCTGTGCTCTTTGAAGTCTCTGCAAGCTGCGGGGGAGGATGGCAGTGTCTGGAACATACAA
 A K W S Q V R K D L C S L K V S L Q A A G G G W Q C L E L Q 226
 1261 ACNCCAGCCGACAGTGGCGGAAAGAGATCTTCTCCCTGCTGCCCCACATGGCTGACATGTCAACCTACATGTTCAAAGGCATCATCAGC
 T P S R Q W R K E I F S L L P H M A D M S T Y M F K G I I S 256
 1351 TTTGCCAAAGTCATCTCCTACTTCAGGGACTTGCCCATCGAGGACCAGATCTCCCTGCTGAAGGGGCGCTTTCGAGCTGTGTCAACTG
 F A K V I S Y F R D L P I E D Q I S L L K G A A F E L C Q L 286
 1441 AGATTCAACACAGTGTTCACCGGGAGACTGGAACCTGGAGTGTGGCGGTGCTCCTACTGCTTGGAGACACTGCAGGTGGCTTCCAG
 R F N T V F N A E T G T W E C G R L S Y C L E D T A G G F Q 316
 1531 CAACTTCTACTGGAGCCCATGTGTAATTCCACTACATGCTGAAGAAGCTGCAGCTGCATGAGGAGGATATGTGCTGATGCAGGCCATC
 Q L L L E P M L K F H Y M L K K L Q L H E E Y V L M Q A I 346
 1621 TCCCTCTTCTCCCCAGACCGCCCGAGGTGTCTGCAGCACCGCGTGGTGACCCAGCTGCAGGAGCAATTCCGCCATTACTCTGAAGTCCTAC
 S L F S P D R P G V L Q H R V V D Q L Q E Q F A I T L K S Y 376
 1711 ATTGAATGCAATCGGCCCCAGCCTGCTCATAGGTTCTTGTTCCTGAAGATCATGGCTATGCTCACCGAGCTCCGCAGCATCAATGCTCAG
 I E C N R P Q P A H R F L F L K I M A M L T E L R S I N A Q 406
 1801 CACACCCAGCGGCTGTGGCATCCAGGACATACACCCCTTTGTCTACGCCCTCATGCAGGAGTTGTTCCGCATCACAGGTAGCTGAGCG
 H T Q R L L R I Q D I H P F A T P L M Q E L F G I T G S * 434
 (SEQ ID NO:2)
 1891 GCTGCCCTTGGGTGACACCTTCGAGAGGCAGCCAGACCCCTCTGAGCCGGCACTCCCGGCCAAGACAGATGGACACTGCCAAGA
 1981 GCCGACAATGCCCTGTGGCCTGTCTCCCTAGGGAATTCCTGTATGACAGCTGGCTAGCATTCCTCAGGAAGGACATGGGGTGCCCC 2068
 (SEQ ID NO:1)

Fig. 1B

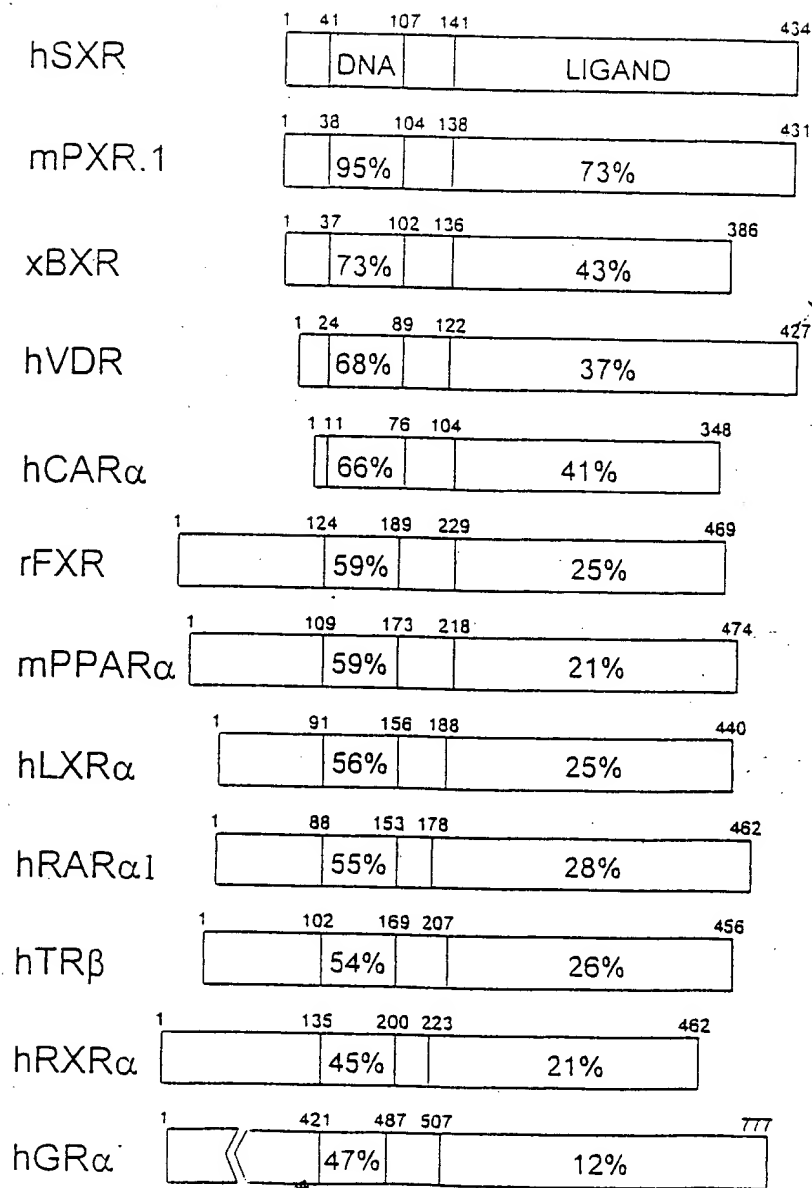


Fig. 1C

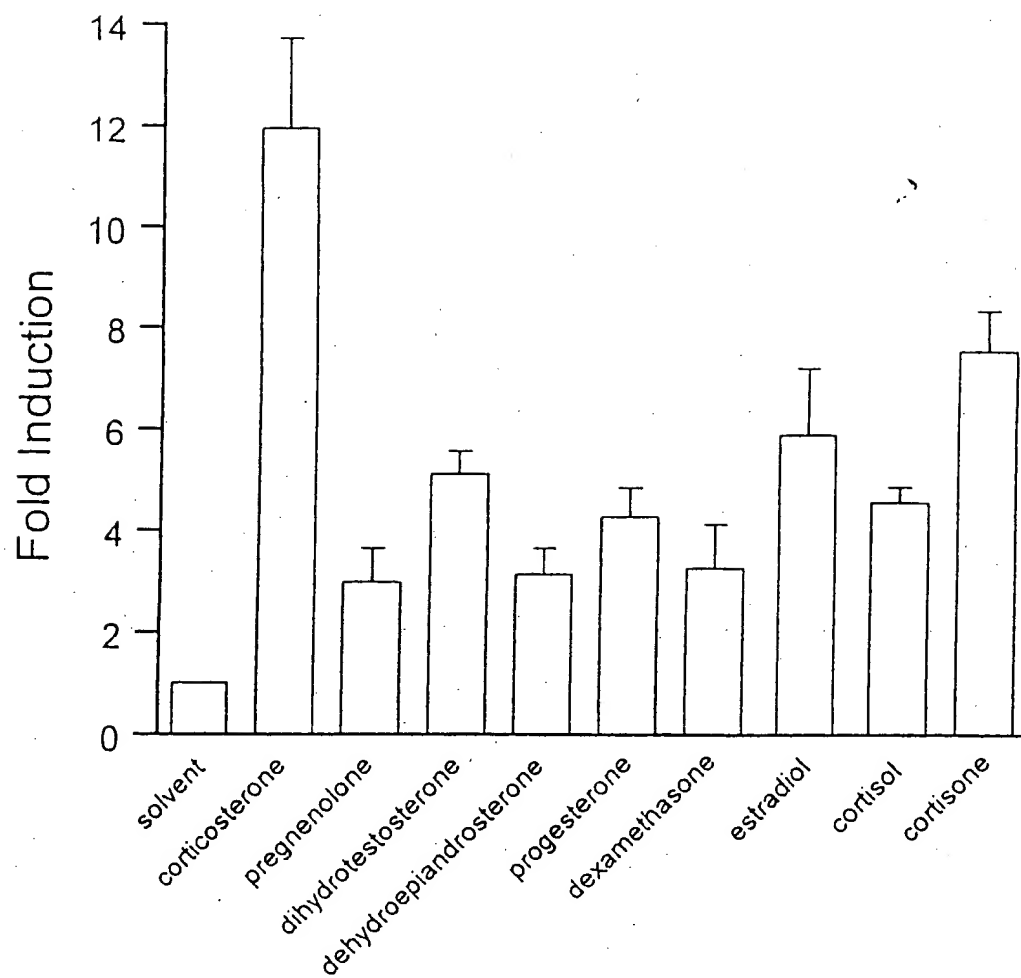


Fig. 2

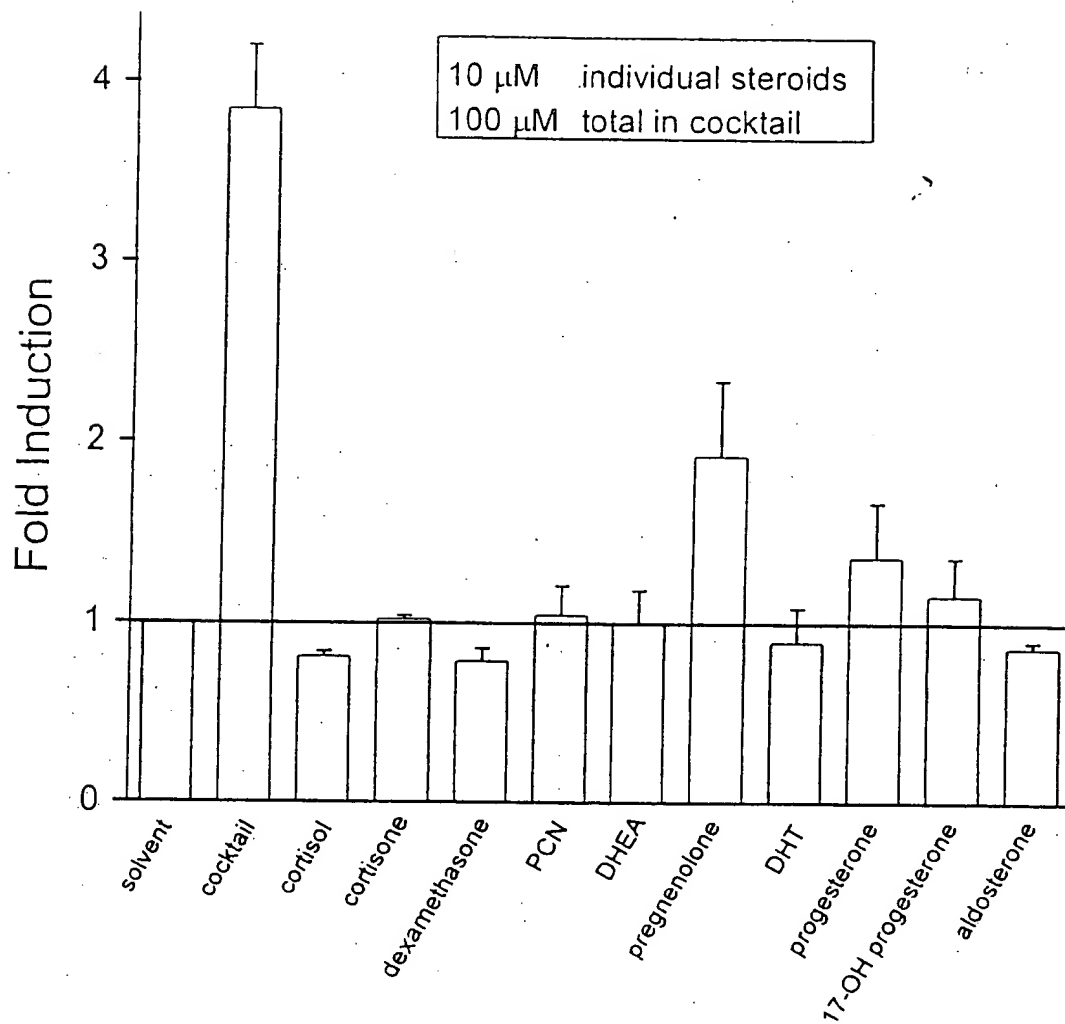


Fig. 3

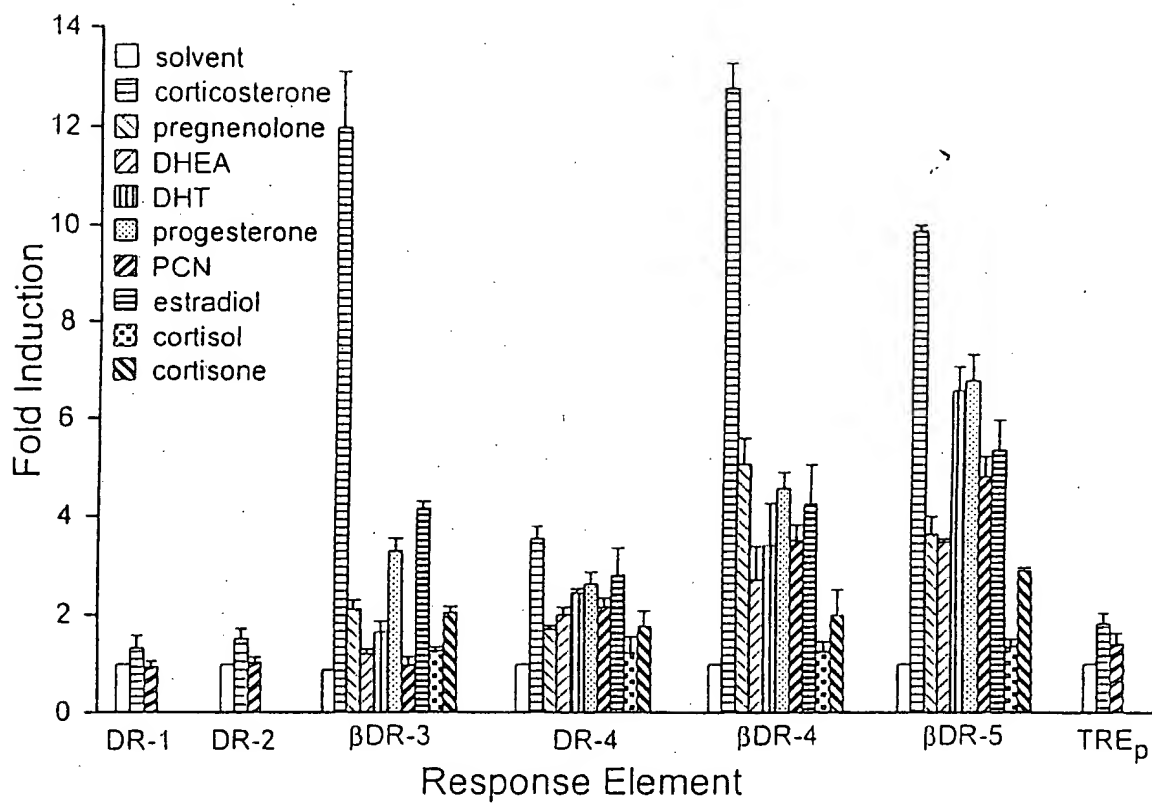


Fig. 4

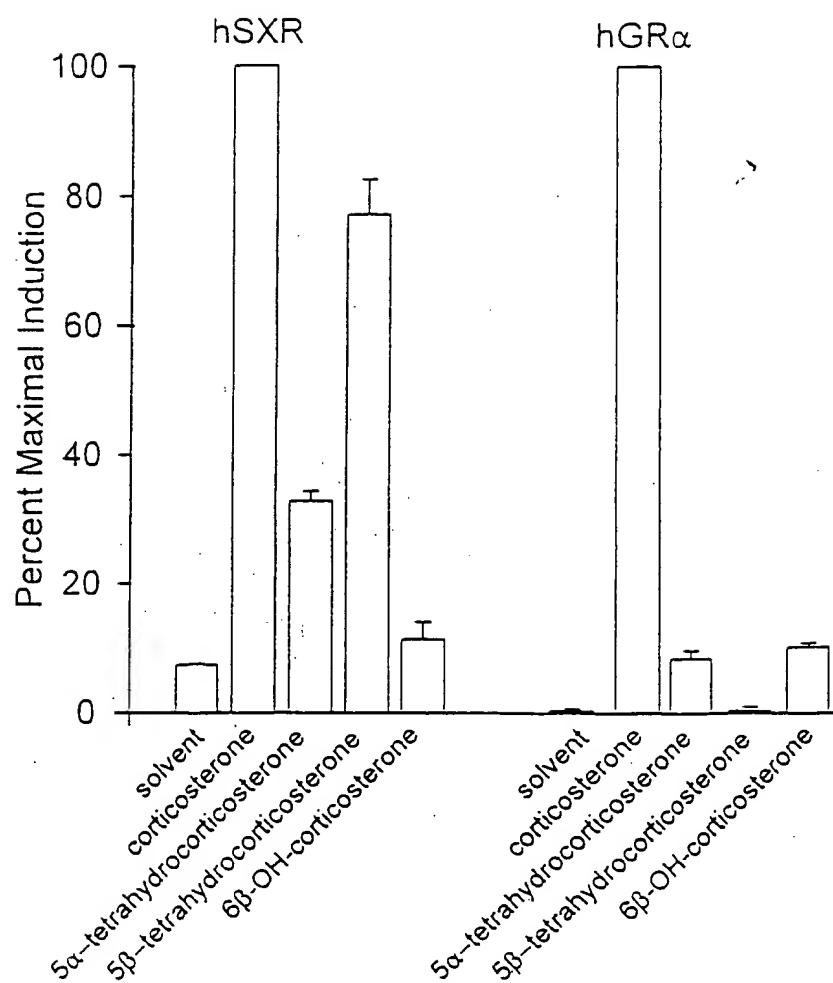


Fig. 5

DR-3

rCYP3A1 tagac AGTTCA tga AGTTCA tctac (SEQ ID NO:3)
rCYP3A2 taagc AGTTCA taa AGTTCA tctac (SEQ ID NO:4)
rUGT1A6 actgt AGTTCA taa AGTTCA catgg (SEQ ID NO:5)

DR-4

rbCYP2C1 caatc AGTTCA acag GGTTCa ccaat (SEQ ID NO:6)
rP450R cac AGGTGA gctg AGGCCA gcagc AGGTcG aaa
(SEQ ID NO:7)

DR-5

rCYP2A1 gtgca GGTTCa actgg AGGTCA acatg (SEQ ID NO:8)
rCYP2A2 gtgct GGTTCa actgg AGGTCA gtatg (SEQ ID NO:9)
rCYP2C6 agtct AGTTCA gtggg GGTTCa gtctt (SEQ ID NO:10)
hCYP2E1 gagat GGTTCa aggaa GGGTCA ttaac (SEQ ID NO:11)

Fig. 6A

CYP3A4 tagaata TGA ACT caaagg AGGTCA gtgagtgg (SEQ ID NO:33)
CYP3A5 tagaata TGA ACT caaagg AGGTAA gcaaaggg (SEQ ID NO:34)
CYP3A7 tagaata TTA ACT caatgg AGGC.A gtgagtgg (SEQ ID NO:35)

Fig. 6B

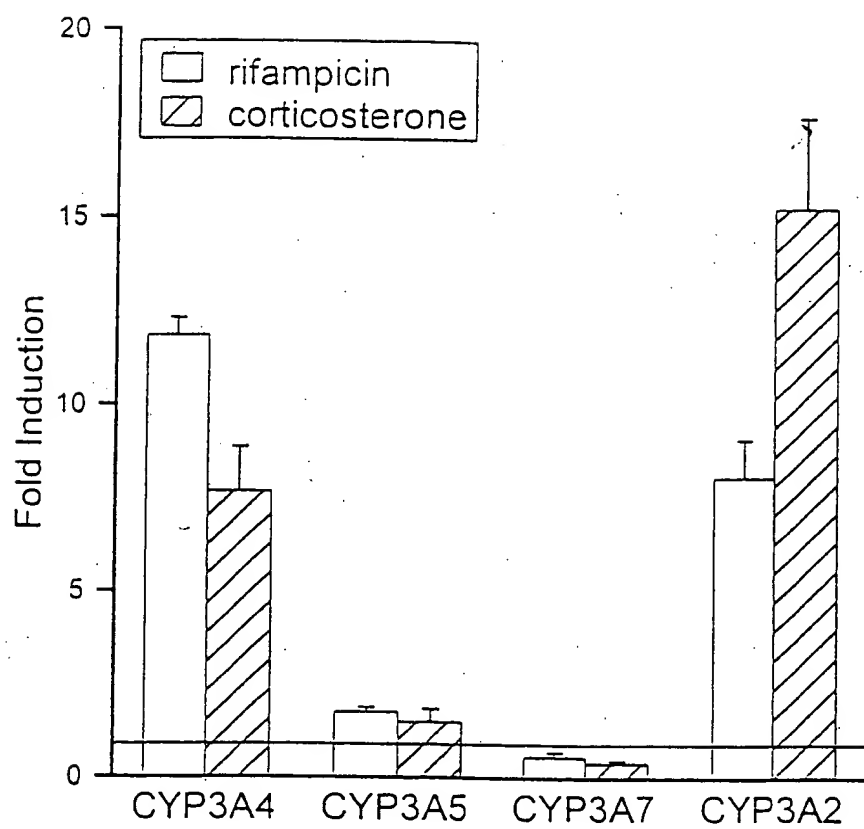


Fig. 6C

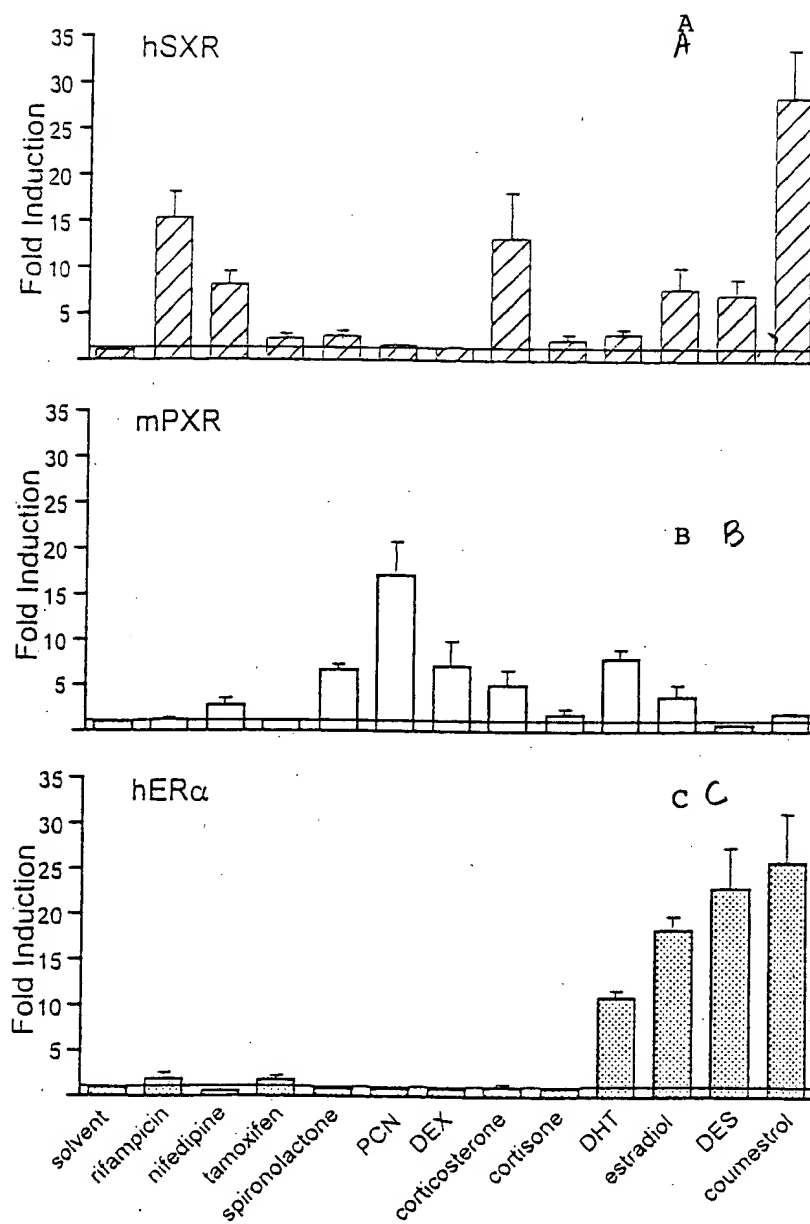


Fig. 7

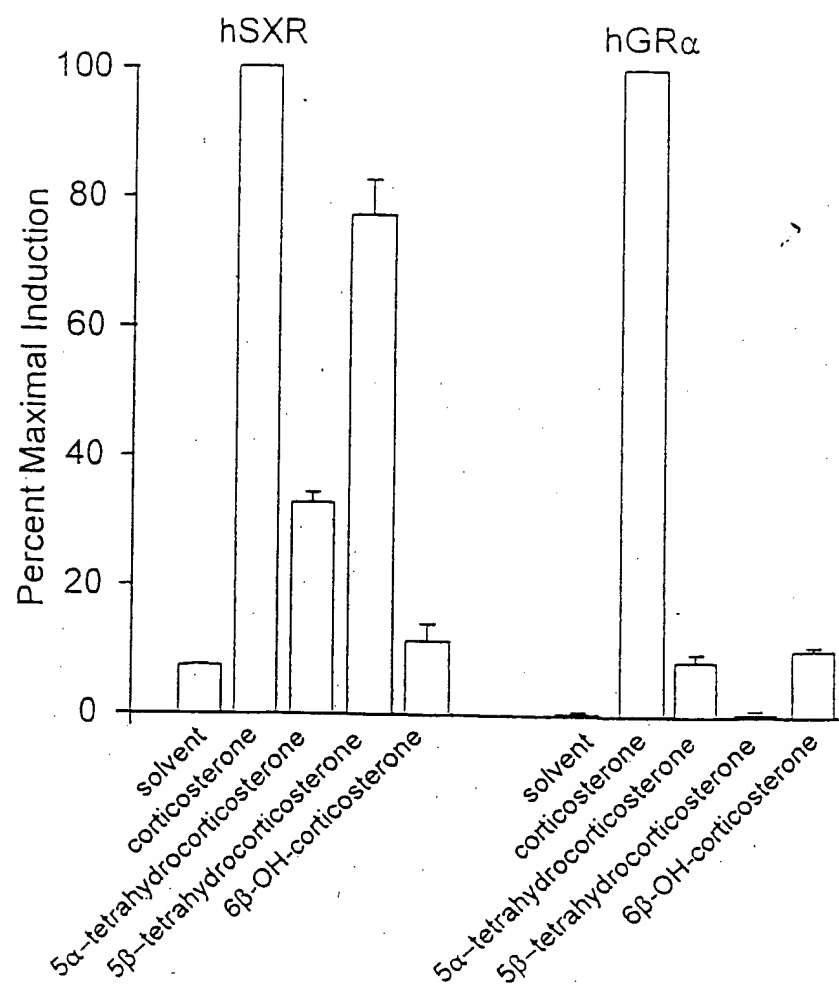


Fig. 7D

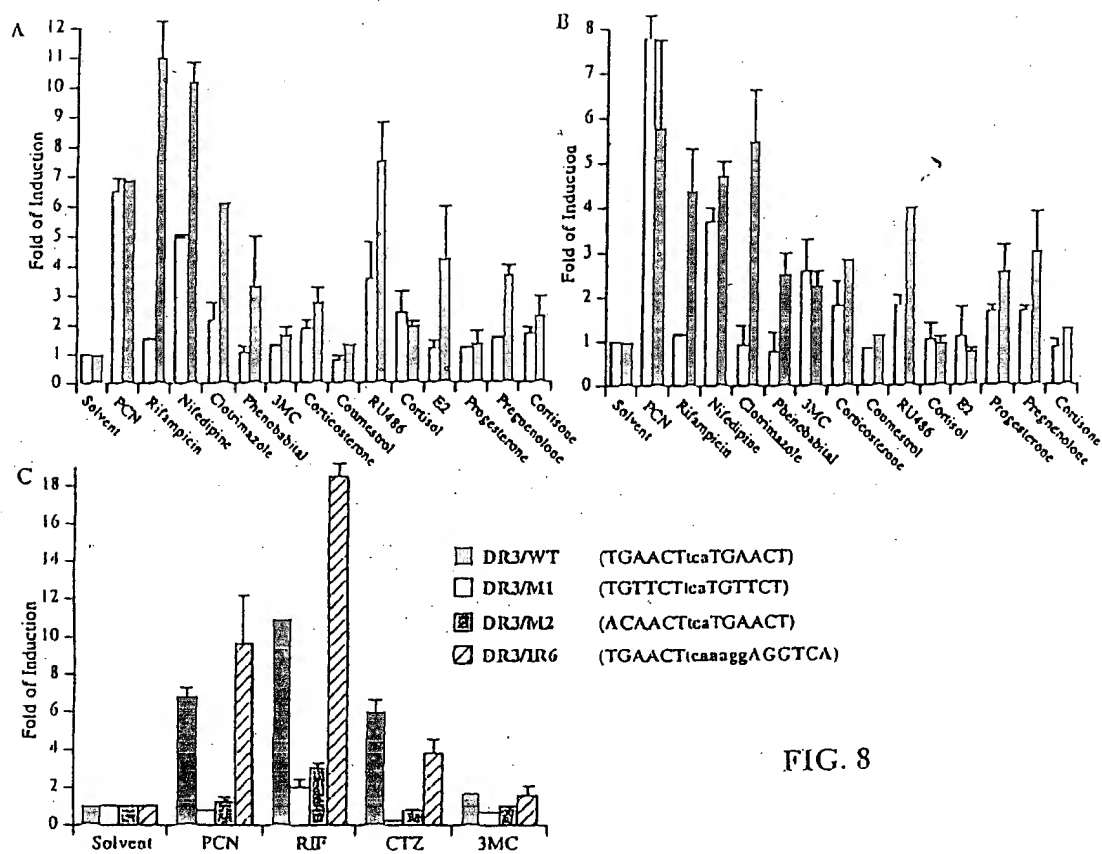


FIG. 8

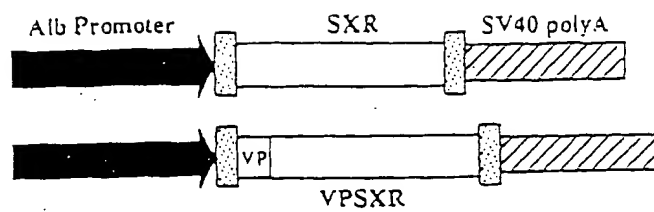


FIG. 9

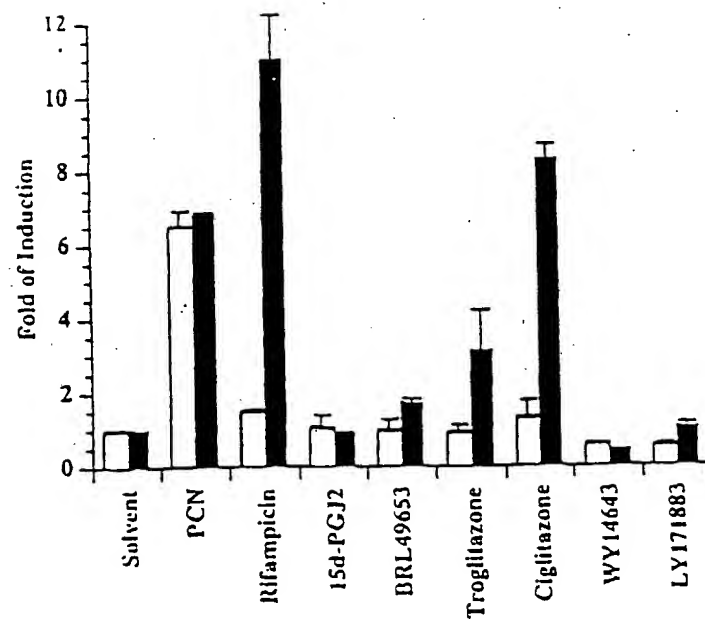


FIG. 10

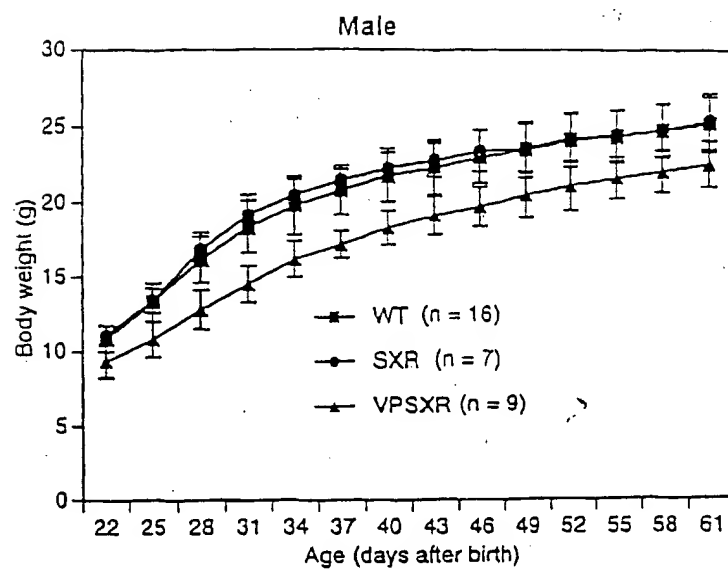


FIG. 11

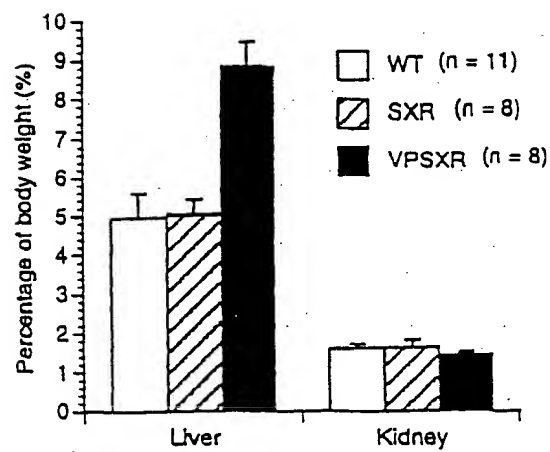


FIG. 12